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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,889	08/25/2003	Pat A. Bolen	115584-00325	1245
27557	7590	06/15/2004	EXAMINER	
BLANK ROME LLP 600 NEW HAMPSHIRE AVENUE, N.W. WASHINGTON, DC 20037			NGUYEN, PHUONGCHI T	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/646,889

Applicant(s)

BOLEN ET AL.

Examiner

Phuongchi Nguyen

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6-8 and 11 is/are rejected.
- 7) ☒ Claim(s) 3-5, 9 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 and 6-8 rejected under 35 U.S.C. 102(b) as being anticipated by Kawahara et al (US5246377).

In regarding to claim 1, Kawahara et al discloses a modular clockspring having a plurality of individually modifiable modules (10, 20, 11) (figure 1), comprising a housing module (11) and a cover module (10, 20) which are generally circular shaped and matable to form an enclosure (10+ 20+ 11), a flat cable module (30) placed inside the enclosure (10+20+11) formed by the housing module (11) and a cover module (10+20), an ID connector module (31) secured to an inner end of the flat cable module (30) and an OD connector module (32) secured to an outer end of the flat electrical cable (module) (30).

In regarding to claims 2 and 8, Kawahara et al discloses the modular clockspring wherein the ID connector module (31) protrudes through an opening (of 21) in the cover module (20), and the ID connector module (31) and the cover module (20) are capable of rotating simultaneously relative to the housing module (11) (figure 1).

In regarding to claims 6 and 7 Kawahara et al discloses the modular clockspring wherein the clockspring is used in a steering column of an automobile (column 3, lines 56-57).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2833

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara et al (US5246377) in view of Miyahara et al (US523420).

Kawahara et al discloses the OD connector module (32) secures to the housing module (11) (on 11a) (column 6, lines 56-58). Kawahara et al discloses the invention, but lacks a locking module. However, Miyahara et al teaches the modular clockspring for use in an automobile further comprising a locking module (2c) that mate (by connecting to 6c) with the housing module (6) (figure 1). It would have been obvious to one having ordinary skill at the time the invention was made to modify the connector module of Kawahara et al by providing the locking module as taught by Miyahara et al for locking the housing into the stationary position.

***Allowable Subject Matter***

5. Claims 3-5 and 9-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: None of prior art teaches or suggests the flanges of the hub engaging the edges of the inner slot section to secure the cover module to the housing module.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Du-Rocher et al (US5651687); Horiuchi (US5226831) ; Dumoulin (US5928018); Ishikawa et al (US5915983) ; Kawamura (US6390838B1) ; Ueno et al (US5286219) ; Kawamoto (US5630723) ; Adachi et al (US6409527B1) and Henderson et al (US6299454B1) are cited to show in the connector module having ID connector and OD connector.

Art Unit: 2833

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchi Nguyen whose telephone number is (571) 272-2012. The examiner can normally be reached on 8:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on (571) 272-2800 ext 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PCN

June 7, 2004

  
**ROSS GUSHI**  
**PRIMARY EXAMINER**